

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested in view of the following remarks.

Claims 1-59 are pending and have been rejected.

The examiner has rejected claims 1-4, 6-17, 19-30, and 32-59 under 35 U.S.C. §103(b) as unpatentable over U. S. Patent No. 5,617,857, Chader et al. ("Chader") in view of U. S. Patent No. 5,873,814, Adair ("Adair"). This rejection is respectfully traversed.

Chader is directed to a smart instrument tracking device combination for use with a surgical instrument. The system of Chader enables a user to determine the position and orientation of a surgical instrument by tracking the position of the tracking device attached to the instrument with an optical surgical navigation system. The only display in Chader is a large fixed display associated with the computer that drives the surgical navigation system. There is no disclosure of a display that is portable or could be moved with the surgical instrument.

Adair is directed to an endoscope system. In one embodiment, Adair discloses a display attached to the endoscope unit. Adair does not disclose the use of a navigation system. All positioning in Adair is done visually, either by direct line of sight or through a visual image from a camera associated with the tip of the endoscope. Because of the visual nature of the positioning, Adair discloses the advantage of having the display within the line of sight of the surgeon.

Independent claim 1 is directed to a display unit for use with a surgical instrument that has an associated tracking unit to communicate position and orientation information to a surgical navigation system. The navigation system of claim 1 is similar to that disclosed in

Chader. The display device of claim 1 provides position information from the navigation system and is not a visual camera display as in Adair. There is no motivation in either Chader or Adair that would have lead a person of ordinary skill to have removed the differences from either Chader or Adair and have combined these references in the manner the examiner has done to reject claim 1 and the claims dependent on claim 1. Relative to the dependent claims, there is no disclosure in either Chader or Adair of displaying a predetermined position and displaying a position of the tool tip relative to the predetermined position or the other limitations of claims 2 to 4. For at least these reasons, the rejection of claims 1-4 and 6-14 are no longer warranted and should be withdrawn.

With respect to independent claim 15, this claim is directed to a display unit that is to be used with a surgical navigation system. This unit has a body, a display device, a tracking unit associated with the body, a communications link and an attachment device. Neither Chader nor Adair disclose a display unit that has a body with an associated tracking device. In particular, this difference would not have been obvious to a person of ordinary skill at the time the invention was made and there would be no motivation provided by either Chader or Adair to make the combination of references the examiner has made in rejecting claim 15 and the claims dependent thereon. Therefore, the continued rejection of claims 15-17, and 19-27 would appear unwarranted and should be withdrawn.

Claim 28 is an independent claim that relates to a surgical tool that has a display unit associated with the tool body and a tracking unit associated with the tool body such that display will enable a user to track the location of the tool tip relative to a predetermined position. Again, neither Chader nor Adair disclose individually or in combination such a surgical tool. Furthermore, these references do not provide a person of ordinary skill with the motivation to remove the differences from the individual references to arrive at the invention as claimed in claim 28. For at least these reasons, the rejection of claims 28-30, and 32-40 would appear unwarranted and should be withdrawn.

Claim 41 is an independent method claim for a method of positioning a tool tip relative to a predetermined position. The method has two steps, viewing the position of the tool tip relative to the predetermined position and guiding the tip to the predetermined position while viewing both the display and the predetermined position. Neither Chader nor Adair disclose these steps. In addition, the differences between what is claimed and the disclosure of either Chader or Adair would not have been obvious given the differing environments of Chader and Adair. Adair is a completely visual system and Chader is a computer assisted navigation system. A person of ordinary skill would not have been motivated from the teaching of either reference to combine them in the manner that the examiner has done. Therefore, the rejection of claims 41-50 are considered as no longer appropriate and should be withdrawn.

Lastly, claim 59 relates to a method of positioning a surgical device. This method had two steps, viewing information representing the position of the device on a display and manipulating the device using the data on the display and at the same time viewing both the display and the anatomy of the patient. Chader does not disclose the viewing of the display and the anatomy at the same time and Adair does not disclose including position data on the display. The display of Adair is visual and does not include position data. Further the differences between the systems of Chader and Adair are such that a person of ordinary skill would not have the motivation from the disclosures of Chader or Adair to combine these documents in the manner done by the examiner. For at least these reasons, the continued rejection of claims 51-59 would appear unwarranted and should be withdrawn.

The examiner has also rejected claims 5, 18, and 31 under 35 U.S.C. §103(b) as unpatentable over U. S. Patent No. 5,617,857, Chader et al. (“Chader”) in view of U. S. Patent No. 5,873,814, Adair (“Adair”), and further in view of U. S. Patent Publication No. 2003/78,494, Panescue et al. This rejection is respectfully traversed.

Appl. No. 10/617,077
Response dated December 8, 2005
Reply to O.A. of September 8, 2005

Claims 5, 18, and 31 are dependent on claims 1, 15 and 28. It is applicants position that the independent claims are not properly rejectable based on Chader and Adair. For this reason, the further rejection of claims 5, 18, and 31 would appear unwarranted and should be withdrawn.

Applicants believe that the present application is in condition for allowance. An early allowance by the examiner is respectfully requested.

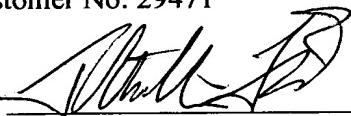
Deposit Account Authorization

The Commissioner is hereby authorized to charge any deficiency in any amount enclosed or any additional fees which may be required during the pendency of this application under 37 CFR 1.16 or 1.17, except issue fees, to Deposit Account No. 50-1903.

Respectfully submitted,

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December 8, 2005